

Museum of Science and Industry

57th Street at Lake Shore Drive

**SUBMITTED TO THE COMMISSION ON CHICAGO LANDMARKS
JANUARY 5, 1994**



**City of Chicago
Richard M. Daley, Mayor**

**Department of Planning and Development
Valerie B. Jarrett, Commissioner**

The Commission on Chicago Landmarks, whose nine members are appointed by the Mayor, was established in 1968 by city ordinance. It is responsible for recommending to the City Council that individual buildings, sites, objects, or entire districts be designated as Chicago Landmarks, which protects them by law.

The Commission makes its recommendation to the City Council only after careful consideration. The process begins with an extensive staff study, summarized in this report, which discusses the historical and architectural background and significance of the proposed landmark.

The next step—a preliminary determination by the Commission that the proposed landmark is worthy of consideration—is important because it places the review of building permits for the property under the jurisdiction of the Commission during the remainder of the designation process.

This Preliminary Summary of Information is subject to possible revision and amendment during the designation proceedings. Only language contained within the Commission's recommendation to the City Council should be regarded as final.

COVER: The main entrance of the Fine Arts Building during the 1893 World's Columbian Exposition. Most visitors approached the building across the lagoons from the south, many by Venetian-styled gondolas. Several features on this southern facade were not retained in the building's reconstruction in 1930 for the Museum of Science and Industry, such as the monumental figure of Athena on the staircase, the lions flanking the entrance, and the word "art" in the pediment.

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The Museum of Science and Industry is the last surviving building from the 1893 World's Columbian Exposition. A 1936 photo, looking north, shows the museum's Jackson Park site as the building was being reconstructed.

Museum of Science and Industry

(formerly the Fine Arts Building)
57th Street at Lake Shore Drive

Architect: Charles B. Atwood
Date: 1891-93
Renovations: Graham, Anderson, Probst & White,
1929-40;
Shaw, Naess & Murphy,
1930-41

The building that today houses the Museum of Science and Industry on Chicago's South Side is steeped in the city's cultural history.

- ▶ It is the only surviving building from the World's Columbian Exposition of 1893, a six-month-long event that attracted 21 million people and was so vital to the city's heritage that it was commemorated as one of the four stars on the city flag.

- ▶ The building was reconstructed in 1933 and became the home of the new Museum of Science and Industry. Its opening coincided with the city's second world's fair, the Century of Progress Exposition. Much of the Art Deco interior treatment from this period remains intact and is a distinctive reference to that fair.

- ▶ The building's exterior is one of the city's finest examples of Beaux-Arts architecture, a style that became even more popular because of the visibility of this and other buildings at the 1893 fair.

- ▶ The relationship of the former Fine Arts Building to the lagoons of Jackson Park provides a vivid reminder of the physical layout of the Columbian Exposition, which became a model for the City Beautiful Movement of civic planning.

- ▶ The two lions that flanked the building's south entrance during the Columbian Exposition were recast in bronze after the fair and relocated to the entrance of the new Art Institute building on Michigan Avenue.

- ▶ Following the Columbian Exposition, the building became the first home of the Field Museum of Natural History, many of whose exhibits came from the fair itself.

- ▶ During the 1920s, after the Field Museum moved to its present home at the south end of Grant Park, the building became the focal point of one of the city's earliest preservation causes, a fight that pitted traditional against modernist architects.

As much as the institutions it has housed, the museum structure itself, through its size and grandiose architecture, is an enduring presence in Chicago's culture, past and present.

The Fine Arts Building (1891-93)

The significance of the World's Columbian Exposition was profound and long lasting. Not only did it demonstrate to the world American industry and innovation, it also illustrated the cultural, artistic, and architectural maturity of the nation, region, and city.

Dedicated in October 1892 and opened to the public in May 1893, the fair was created by people who sought to gain a place for Chicago among the great cities of the world. The enormity of their task and the high degree of success they achieved was magnified by the fact that the fair took place only 60 years after the city was founded, and just two decades after it was devastated by the Great Fire of 1871. In the six months that the fair was open, 21 million people attended.

From the time that Chicago was chosen as the host city for the 400th anniversary celebration of Columbus's landing in the New World, the local organizers were determined that the Columbian Exposition would be a grand spectacle. These

organizers included prominent businessmen, politicians, professionals, and organizations. In order to realize their concept of a great event in a spectacular setting, they were determined to attract the most talented American designers in all fields.

Planning of the Columbian Exposition

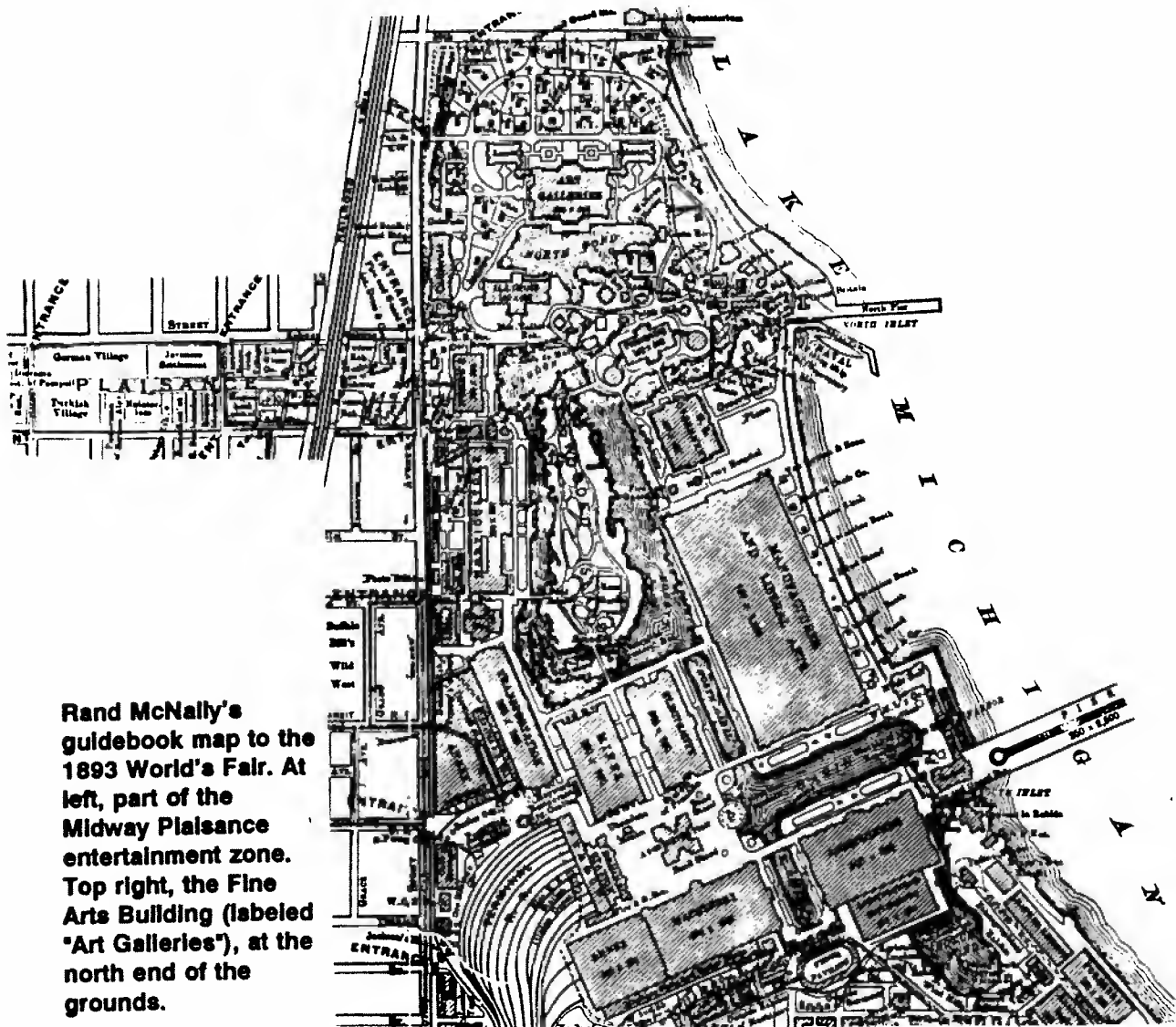
Preeminent among these was the founder of American landscape architecture, Frederick Law Olmsted (1822-1903), who with his partner Calvert Vaux, had designed Chicago's south side park system in 1871. Although many parts of this plan had been implemented by 1890, the south lakefront park known as Jackson Park was still undeveloped marshland. Olmsted, who was consulted during the fair's site selection process, favored the Jackson Park site due to the potential for developing this part of his earlier plan.



The site of the Fine Arts Building was at the northern end of the fair grounds (top right), where the formality of the classical building designs stood in stark contrast to the winding shores of Jackson Park's lagoons. (Left, the Horticulture Building; center, the Illinois Pavillon.)

The guiding force behind the planning and style of the fair was Daniel H. Burnham (1846-1912), principal of the Chicago architecture firm of D.H. Burnham & Company. The design committee he chaired included New York architects Charles McKim and Richard Morris Hunt, artists Augustus Saint-Gaudens and Louis Millet, and Olmsted, who was assigned to draft a new plan for the 686-acre site that would accommodate the immediate needs of the fair as well as the site's anticipated reuse as a public park.

Olmsted modified his 1871 plans for a park dominated by natural design elements, and worked with the architects to establish a contrast between the formal and the natural. The main fair grounds, excluding the entertainment area along the Midway Plaisance, was

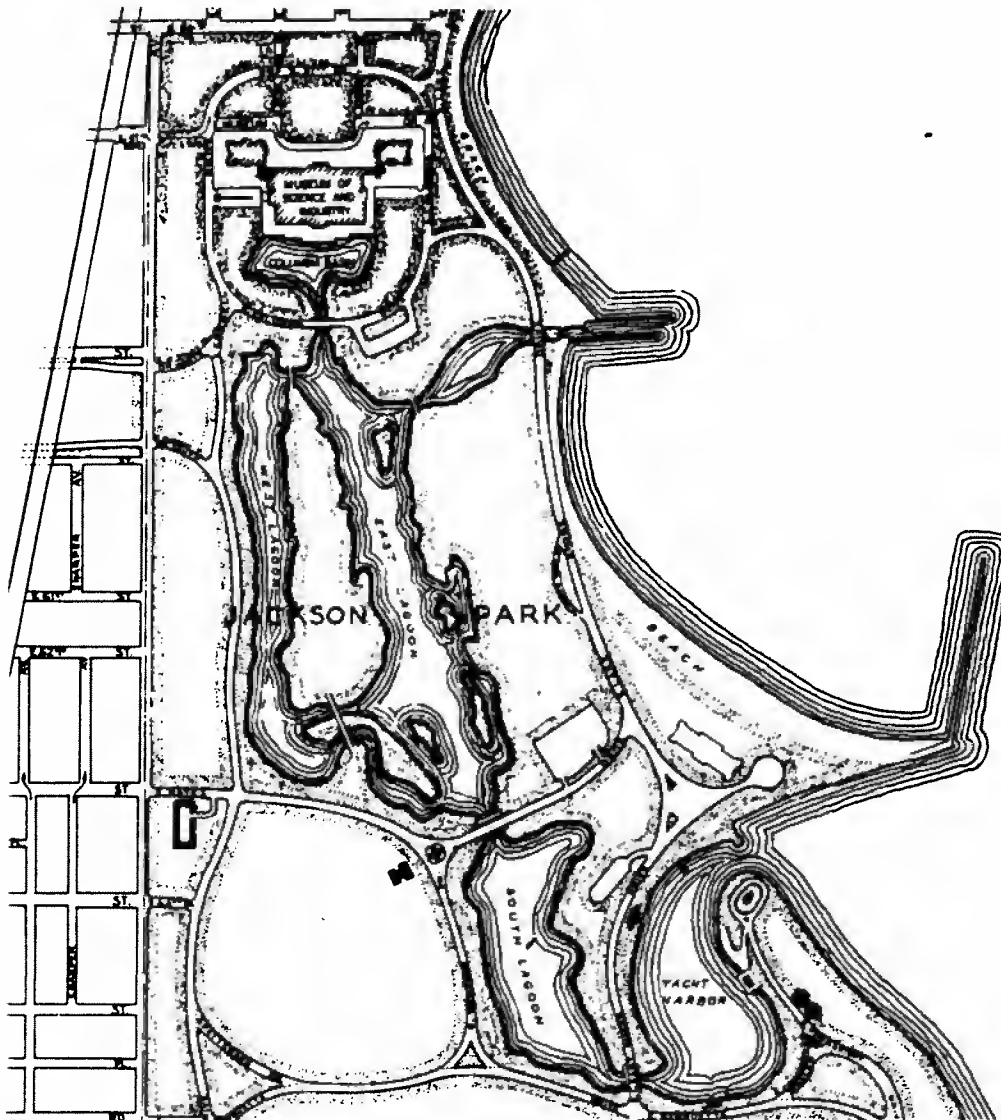


Rand McNally's guidebook map to the 1893 World's Fair. At left, part of the Midway Plaisance entertainment zone. Top right, the Fine Arts Building (labeled "Art Galleries"), at the north end of the grounds.

generally comprised of two distinct parts.

A formal Court of Honor was located at its southern end, where most visitors arrived by rail. Arguably the fair's most important open space, it was surrounded by the largest exposition buildings, which were designed in a unified classical style and were situated around a basin with fountains and monumental sculpture. It was the consistent use of classical formalism and the all-white color scheme of these buildings that inspired the nickname: "White City."

In contrast to the highly manipulated formality of the Court of Honor, the northern end of the grounds offered a more natural setting. This part of the grounds, which included the Wooded Island and the Fine Arts Building, was more in keeping with Olmsted's 1871



A map of Jackson Park from the 1969 Atlas of Chicago. The only remaining fair building: the Fine Arts Building, now the Museum of Science and Industry. Some of the revised site plan was the after-fair work of Olmsted, Olmsted & Elliott.

plan. The smaller buildings in this area did not share any continuity in style or color scheme. Some stood along the shores of a series of lagoons, their main entrances arranged so that visitors would approach by means of motorized launches or imported Venetian gondolas, with views of the facades reflected in the water and silhouettes profiled against the sky.

The site of the Fine Arts Building was the northernmost of the major buildings on the fair grounds, placed so as to be the focus of a vista seen from the center of the fair near the Administration Building. Contrary to the view, from the north, that most visitors have of the building today, the Fine Arts Building was sited so as to be approached from the south. During the fair, the building's north elevation was obscured by a tightly packed collection of smaller buildings built by the individual states. Designed in the romantic styles of the day, these pavilions did not share the unity of color, scale, and design that was imposed on the fair's major buildings.

The fair organizers originally had discussed locating the Fine Arts Building closer to the Loop, so



At the time of the 1893 fair, the north elevation of the Fine Arts Building was obscured by exhibit buildings. This view, looking southwest from what today is the intersection of 57th and Lake Shore Drive, shows the arts building at left, various state pavilions in the center (where museum parking is today), and the Ferris Wheel on the Midway (right).



An early design for the Fine Arts Building by John Wellborn Root. After he died in 1891, the design was assigned to his successor, Charles Atwood.

that it could be reused after the fair as a new Art Institute or public library. A design for the building's west front, which included a Romanesque-style central pavilion, was sketched out by John Wellborn Root, Burnham's design partner. Shortly afterwards, in January 1891, Root died of pneumonia, one week after the first organizational meeting of the architects who were planning the overall design of the World's Columbian Exposition. A month later, for financial reasons, the fair directors voted to abandon the auxiliary Loop site for the Fine Arts Building.

After Root's death, Burnham entrusted the design of the Fine Arts Building to the Chicago firm of Burling and Whitehouse but, when Whitehouse also fell ill, the firm turned down the opportunity. At least one other firm rejected Burnham's offer before, apparently under pressure due to the tightening constraints of time, he assigned the job to his firm's newly hired chief designer, Charles Atwood.

Charles B. Atwood, Architect

Charles Bowler Atwood (1848-95) was one of the most respected designers of monumental, classically inspired buildings in America during the late nineteenth century. He began his career in 1865 as a draftsman in Worcester, Massachusetts, and moved to Boston a year later to continue his training and take courses at the Lawrence Scientific School.

He opened his own practice in 1872 and, in 1874, won the design competition for the city hall in



A caricature of architect Charles Atwood with a model of his Fine Arts Building.

Holyoke, Massachusetts, with a Victorian Gothic style entry. Attracted throughout his career to historic architecture, he began to use archaeologically accurate measured drawings of ancient monuments as the point of departure for most of his designs.

Although talented and marketable as a designer, Atwood had considerable trouble managing his business and personal affairs. He was fired as the Holyoke City Hall project was nearing completion, marking the first of a series of projects for which his design ideas were accepted but unrealized.

Angered by his dismissal, Atwood moved to New York where he worked for the decorating firm of Herter Brothers, an association that led to a series of critically acclaimed designs for such notable patrons as William H. Vanderbilt. His classical details were praised by such authorities as Charles McKim, the most acclaimed Beaux-Arts architect of his time, who once told Burnham: "Damn him, he is right every time."

In spite of his successes, there were continuing disappointments. In 1886, Atwood won the competition for the proposed Boston Public Library, but his project was not carried forward. Two years later, he won the competition for an addition to New York's City Hall, but the design was later declared ineligible for not having included cost estimates.

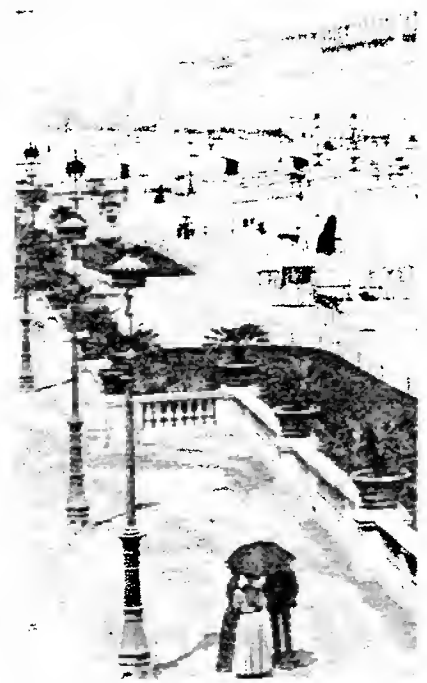
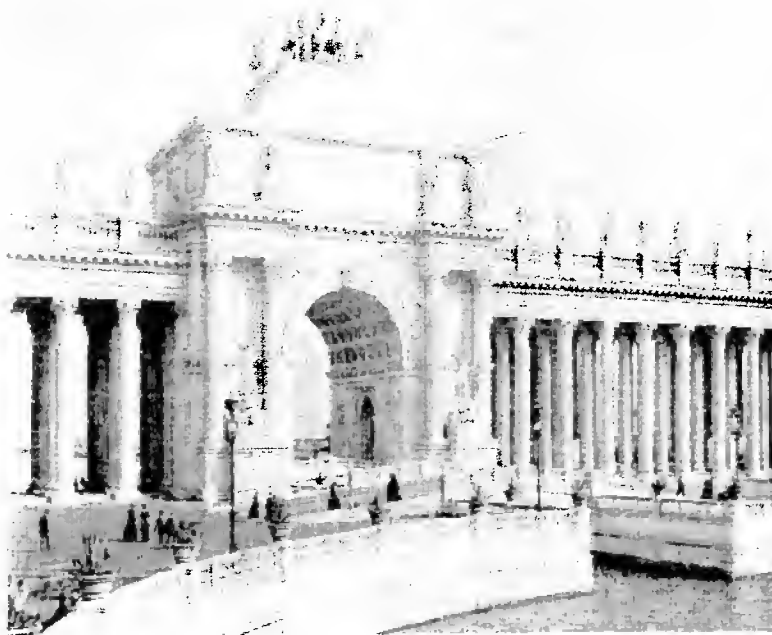
Beset by professional and personal turmoil, Atwood left New York in 1891 to become the chief designer for D.H. Burnham & Company, following John Root's death. Within a year, Burnham also appointed Atwood to be the fair's Chief Architect, a choice that was firmly supported by the other Eastern architects on the fair's design committee.

Atwood designed some 50 structures for the fair, many of which were supplementary structures or "finishing" elements, such as the obelisk and rostrum column that stood south of the Court of Honor. However, he also designed three of the fair's most imposing features: the Illinois Central Railroad Station, the peristyle of the Court of Honor, and the Fine Arts Building. According to Burnham: "More of the actual beauty of the fair was due to Atwood and his associated work with (Henry S.) Codman (an assistant of Olmsted) than to anyone else."

Atwood's chief assistant in realizing these designs was 25-year-old Ernest R. Graham (1868-1936), a promising young designer with D.H. Burnham & Company who coordinated much of Atwood's work

on-site, including aspects of the construction of the Fine Arts Building. Due to his familiarity with the project, Graham would be called on again, 31 years later as a partner of the firm of Graham, Anderson, Probst & White, to oversee the exterior reconstruction and interior design of the building.

In the two years following the fair, Atwood designed a number of buildings that helped establish the classical vocabulary as a standard for the commercial buildings designed by D.H. Burnham & Company. Among the most well known of these were the Marshall Field Annex (1892-93) in Chicago and the Ellicott Square Building (1894-95) in Buffalo, New York. The most important of his late works, however, was the Reliance Building in Chicago, the first two floors of which had been constructed in 1890 from a design by John Root. The upper 12 stories were completed in 1895 from Atwood's design. It was during the construction of this building that Atwood's health began to deteriorate, partly due to drug addiction, which led to his dismissal from the firm and his death in December 1895.



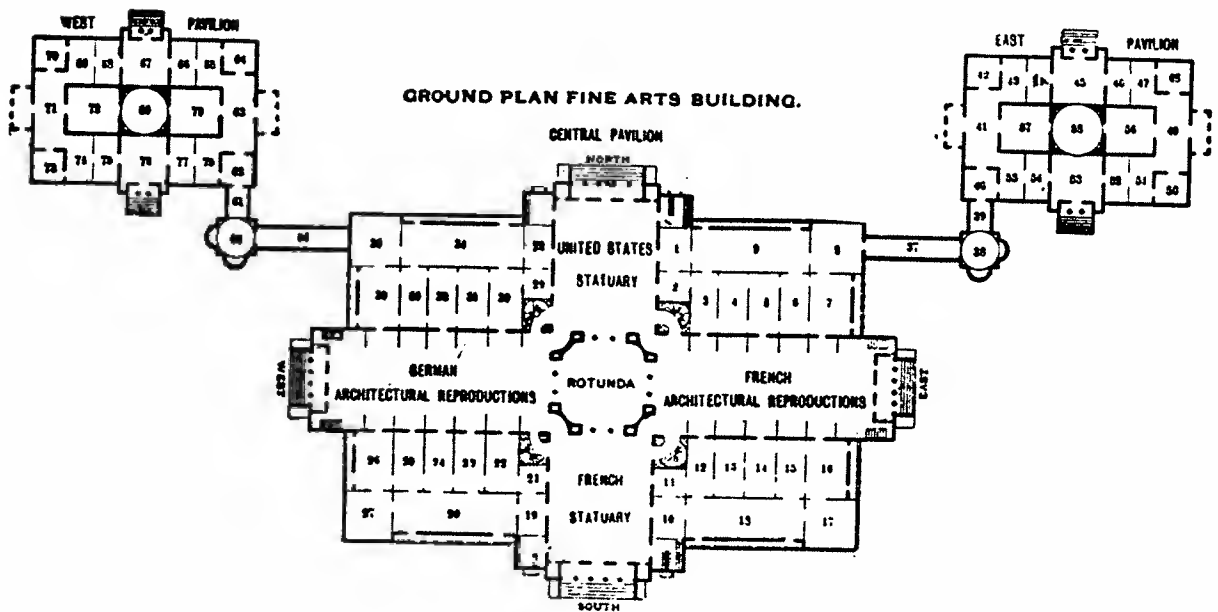
Atwood designed 50 structures at the fair, including the peristyle at the Court of Honor (left), which was the fair's most imposing formal space. He also designed the light fixtures that were a ubiquitous feature of the fair grounds (right). Several survive today in Jackson Park.

The Beaux-Arts Design

Absolutely symmetrical in its plan and elevation, Atwood's design for the Fine Arts Building was a manifestation of the ideals of the leading school of design theory at the time, the *Ecole des Beaux-Arts* in Paris. Atwood followed the Beaux-Arts formula of mixing Greek and Roman classical forms by creating a formal monumental public structure that is complex in its exterior detailing, yet relatively uncomplicated in plan.

The three-story building stands over 120 feet tall at its highest point, the top of its central dome. It is rectangular in form, with cross-axial courts. As a result, the east and west courts are much longer than those that stood north and south of the dome.

Each court had two balconies that ran their entire length, and each was roofed with glass to allow maximum lighting of the interior and the art on display. The smaller rooms on the periphery were illuminated by clerestory windows placed high on the walls; this maximized the wall area available for artwork.

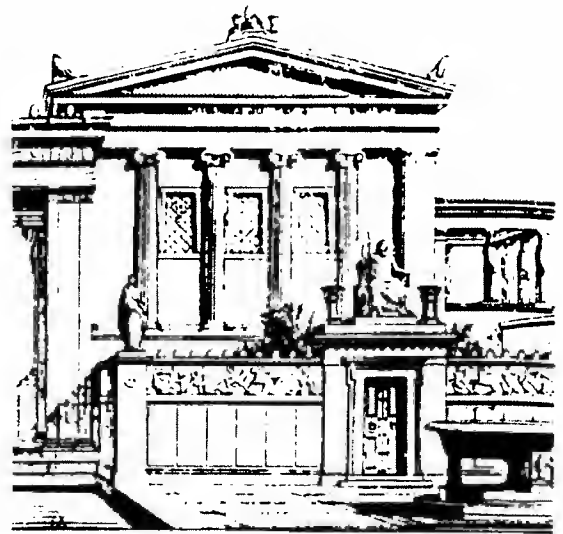


Floor plan of the Fine Arts Building during the World's Columbian Exposition. To visit the French exhibit in the East Pavillon, fairgoers had to pass through sections dedicated to American art or holdings.

The form of the Fine Arts Building derived its overall massing from the monumental public buildings of the Roman imperial era. The north and south porticos in front of the dome are particularly related to the Roman Pantheon, and the massing of the four axial courts are reminiscent of Roman public baths.

The decorative details of the Fine Arts Building were borrowed for the most part from the religious architecture of ancient Greece. The introduction of Greek-inspired elements is evident in the columns which stand between the extended walls of the central portico, which is similar to the handling of the pronaos (antechamber) of the Erechtheion in the Acropolis of Athens. Like the Erechtheion, the Fine Arts Building used the Ionic order, which is characterized by elegant proportions, restrained detailing, undecorated friezes, dentil cornices, and column capitals with large volutes.

The feature of the Fine Arts Building most directly copied from the Erechtheion is its series of porches that replicate--at a scale larger than the original--the famous Porch of the Caryatides, which is supported by six "caryatid" columns in the form of walking female figures. Atwood's adaptation of the design appears on the Fine Arts Building in two configurations: the small porches flanking the staircases of the north and south entrances and the larger ones



The west front of the Erechtheion on the Acropolis of Athens (built c.400 B.C.), many of whose elements are found in the facade of the Fine Arts Building.



A view of the building's main entrance at the time of the fair, looking northwest across the North Pond. Visible are the Wisconsin and Ohio state pavilions and one of the Venetian-style gondolas that brought fair visitors to the Fine Arts Building.

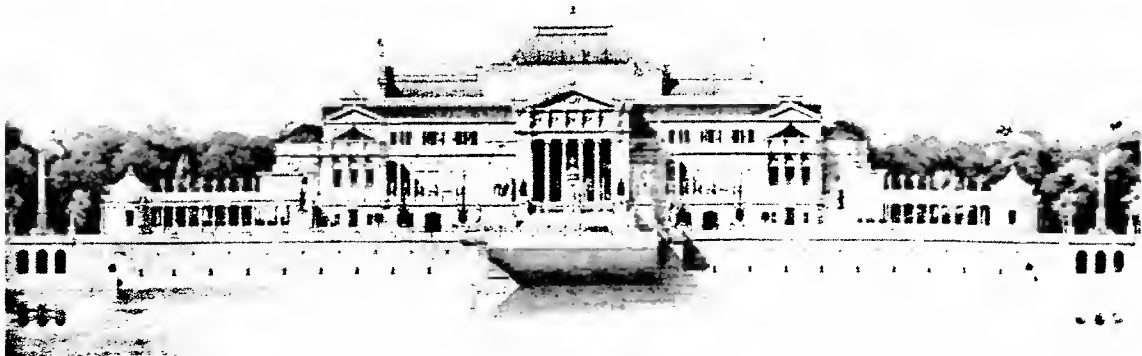
on the east and west sides of the building. All 24 of the caryotid figures on the Fine Arts Building were replicated larger than the originals, standing nearly 13 feet tall and weighing about six tons each.

The Fine Arts Building varied from its ancient prototypes in such details as an attic story in the entrance porticos and in the use of such Doric order elements as the relief panels on the annexes, which were borrowed from the other great monument of the Acropolis, the Parthenon. These sculptural reliefs were copied (even down to their damaged condition) from classical artifacts in the British Museum's collection.

The integration of Greek and Roman elements was the principal feature of the Beaux-Arts classicism of the late-nineteenth and early-twentieth century. Although incongruous to purists of classical architecture, it was considered at the time to be a demonstration of the designers' cultural sensitivities and historic awareness.

In contrast to the neoclassical exterior, the building's interior exhibited modern glass-and-iron construction. Many of the structural members were exposed, including large perforated trusses and simply detailed iron columns. In combination with the skylit courts, this structural aesthetic gave the interior an airiness that contrasted with the massiveness of the exterior. That combination was consistent with the most progressive tenets of the *Ecole des Beaux-Arts*.

An influence on the design of the Fine Arts Building was Emile Bénard's 1867 prize-winning design for "a palace for the exhibition of the fine arts" that he



The 1867 prize-winning design, in a French competition, for a Palace of Fine Arts. The similarities between it and Atwood's 1891 design for the Fine Arts Building were debated at the time of the fair.

completed while a student at the *Ecole*. This project, submitted in the competition for the *Grand Prix de Rome*, featured a building that is similar to that executed by Atwood, both in the massing and stylistic expression of its facade as well as in its intended use. (One of Atwood's other assistants was Alexandre Sandier, a fellow student of Bénard's at the *Ecole*.)

The similarities between the two designs were recognized and debated at the time. In describing the architecture of the fair, the *Gazette des Beaux-Arts* was laudatory in its comments regarding Atwood's design of the peristyle of the Court of Honor, but was critical of what it called his use of an existing design for the Fine Arts Building. The review article noted that:

The design was perhaps a very flattering witness to our architectural superiority, but does not bestow great honor on the imagination of the artist who created the peristyle which we have spoken highly of previously.

Among the reportedly amused observers was Bénard himself. A story told at the time says that when Daniel Burnham took Bénard to see the building, the French architect said: "Not until this moment did I realize how great an architect I am!"



The Fine Arts Building under construction in May 1892. This view looks northeast across the North Pond and predates the construction of the annexes.

Atwood denied the charge of plagiarism in a newspaper article at the time, while acknowledging that he "took as a motive the portico" of Bénard's design:

The difference between me and some other architects is that I know what to take and what to leave, and know how to combine things that come from different sources, while they do not.

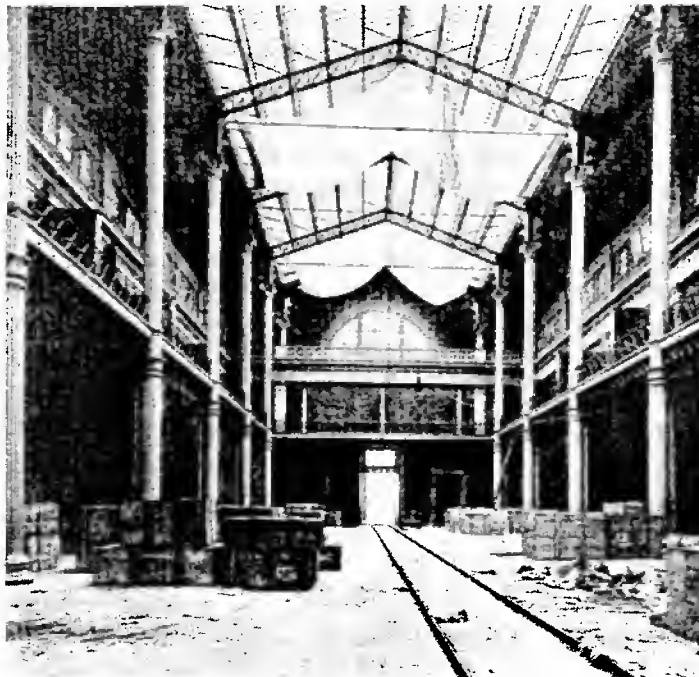
However freely Bénard's design may have been copied, a reference to a Beaux-Arts design that was widely known, at least among architects, would have been appropriate given Burnham's classical ideal for the fair.

Construction of the Fine Arts Building

The value of the art objects that were to be housed in the Fine Arts Building made it necessary to construct the building of the most fireproof materials possible. It was determined that the walls had to be brick; that all of the framing systems of the floors, balconies, and roof had to be metal; and that the floors, except in the balconies, should be concrete. Only the balcony floors, some of the external supports for the ornament, and the exterior columns were wood.

These structural considerations made the amount of time needed to build it longer and its cost higher (over \$671,000) than any other building at the fair. The other fair buildings were, for the most part, large-scale, wood frame structures with metal roofs. Although the structure of the Fine Arts Building was much more substantial, its exterior finishes were identical to those of the other buildings, all of which were rendered in a material called "staff."

Invented for use at the Paris Universal Exposition of 1889, staff was a mixture of hemp, horsehair and plaster. It was harder, more flexible, and more resilient than plaster, yet not as dense, durable, or as costly as stucco. It could be applied to armatures for columns or architectural sculpture in the round, it could be cast to form sculptural panels in relief, or it could be laid up in panels that formed wall sections. It also could be manufactured on site, was durable enough to survive the weather for the duration of the six-month-long fair, and was light enough to minimize stress on a building's framing system.



An Interior view of the east court of the Fine Arts Building, with exhibits still awaiting to be unpacked.

When construction on the Fine Arts Building started in the fall of 1891--a year before its scheduled opening--the design called for it to be wholly contained within the original rectangular plan. However, by the following spring, additional space was needed to accommodate what had been promised to foreign governments and American artists. In order to retain the symmetry of the design, Atwood responded with plans for two new small buildings that would be connected to the original by long corridors off of the building's northeast and northwest corners.

These additions, known as the East and West Annexes, stand two stories tall and were designed as miniature copies of the main building, including exterior detailing and domed profiles. Additional references to the Parthenon appeared on the annexes in the form of relief panels and the processional frieze along the galleries that connect the main building and the annexes. With the addition of the annexes, the building occupied an area of over five acres, with about 600,000 square feet of exhibition space. Its total length of 1,145 feet equals the height of the 100-story John Hancock Building.

One of the building's exterior features were two sculptures of lions, which occupied pedestals flanking the steps to the south main entrance, facing the lagoon. They were the work of Edward Kemeys, the nation's most important sculptor of animals. After the fair, the plaster lions were removed, recast in bronze with funding from Mrs. Henry Field, and donated to the Art Institute of Chicago. The museum, which had recently located to its current location at the corner of Michigan and Adams, placed the lions on pedestals flanking the museum's main entrance. They remain there today, continuing in their role at the World's Columbian Exposition, as guardians at the entrance to the city's most important repository of the fine arts.



Members of the arts jury for the Columbian Exposition pose at the south entrance to the Fine Arts Building. The two lions that flanked this entrance were moved, after the fair, to the Art Institute's main entrance.

The Fine Arts Exhibition

The diverse disciplines of the sciences, arts, and manufactures were unified at the fair through themes of innovation, creativity, and high-quality workmanship. Within this context, much emphasis was placed on contemporary art, particularly that of the United States.

Embarrassed by the small number of pieces, their quality, and the negative critical response American art received at the 1889 Paris Exposition, the organizers of the Columbian Exposition of 1893 were determined to put on a display that would dazzle all visitors, especially foreigners. Europeans had long seen America as a wild and uncultured frontier society; in order to assure the international image of the United States as a civilized world leader in every field, the organizers believed that a massive demonstration of national cultural achievement was necessary.

The 10,000 exhibits in the Fine Arts Building were organized under the banner of the country that held them, rather than by the native land of the artist who produced them. This was particularly important for the display of works by European artists that were held by American public and private collections. These works helped enhance the role of Americans as cultured private citizens and as builders of museums whose collections were worthy of worldwide attention.

While paying homage to the distant and recent past was important, it was contemporary art that received the greatest amount of space and attention during the fair. Critics of the time wrote that the work on exhibit demonstrated that America had equalled the

older nations in the aesthetic quality and creativity of its cultural attainments. It also was the largest exhibition of American art ever assembled in this country, with over 1,000 paintings and hundreds of sculptural objects.

Among the contemporary American painters on exhibit were: Thomas Eakins, Childe Hassam, Elizabeth Gardner, Winslow Homer, John Singer Sargent, Louis Comfort Tiffany, and Chicagoans Charles Corwin and John H. Vanderpoel. American sculptors included: Daniel Chester French, Johannes Gelert, Augustus Saint-Gaudens, A. Stirling Calder (father of twentieth-century master Alexander Calder), and local sculptors Leonard W. Volk and Lorado Taft.

The general reaction of the public was to the sheer quantity of art. As novelist Hildegard Hawthorne remarked: "I have seen more persons looking and hopelessly worn out there than in all the other parts of the Fair put together."



The North Court of the Fine Arts Building housed most of the American sculpture on display at the Exposition.

Aftermath of the Fair (1894-1926)

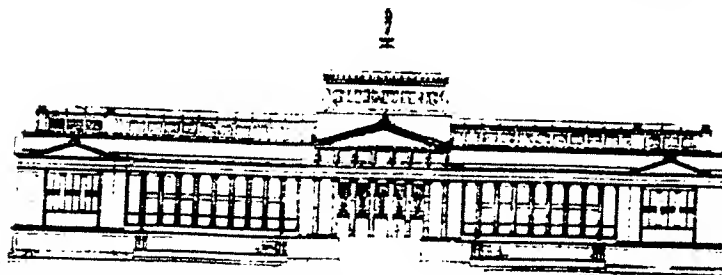
The original intent of the fair organizers had been to demolish virtually everything on the fair grounds, following the six-month exposition, for sale as scrap. However, by mid-fair, there was significant interest for retaining some of the major fair buildings, including the German Building (the most-expensive foreign pavilion), the 31-acre Manufacturers and Liberal Arts Building, the Japanese Ho-o-Den on the Wooded Island, and the Fine Arts Building.

With the end of the fair, a group of Chicagoans announced a plan to perpetuate its memory and splendor through the creation of a "Columbian Museum." As the one building designed from the beginning as a fireproof structure, the Fine Arts Building was the natural choice as the repository for fair artifacts.

Field Museum of Natural History

The movement to create this new institution was led by Marshall Field (1834-1906), founder of the famous local department store, who donated \$1 million for its establishment. Many of the artifacts gathered for this collection had an anthropological interest, since they were left behind by the many foreign groups who had brought characteristic examples of their native culture to the fair. By 1896, the new institution had become known as the "Field Columbian Museum" and, with the expansion of its collections and mission, in 1906 it was renamed the "Field Museum of Natural History."

Within a few years, however, the condition of the building became ever more problematic for the museum. Never intended as a truly permanent structure,



One of the odd legacies of Atwood's design for the Fine Arts Building was this 1894 design entry by Frank Lloyd Wright for a Milwaukee Public Library competition.

Field Museum of Natural History,
Jackson Park, Chicago.



A c.1910 postcard showing the building's use after the fair, as the home of the new Field Museum. The museum moved to its Grant Park location in 1920.

the former Fine Arts Building was constantly in need of costly repairs. Exhibits were damaged due to the condition of the roof which leaked, causing sections of plaster to fall. Also, the exterior facing of staff--the building's fragile, intentionally temporary original exterior finish--began to disintegrate with the passage of the seasons.

In 1909, the board of the Field Museum decided it would be more cost efficient to pursue another site and a new facility rather than renovate the one it had inherited. Negotiations were begun with the South Parks Board, one of the forerunners of the Chicago Parks District, to secure a new site closer to the Loop. The new Field Museum Building at the south end of Grant Park was completed in 1920, but it took over three years to pack and move all of its collections to the new location. Temporary spurs were built from the Illinois Central tracks at 57th Street to the old Fine Arts Building, and from the tracks at Roosevelt Road to the newly constructed building to facilitate the collection's transfer.

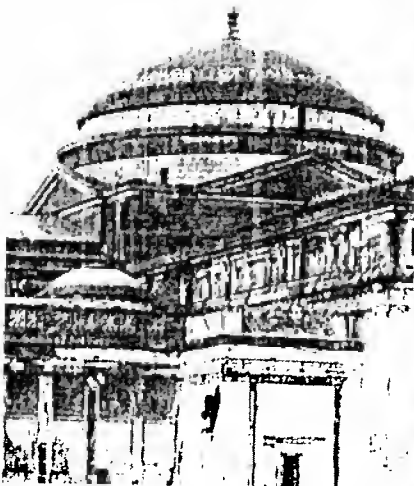
With the removal of the Field Museum's collections, the old Fine Arts Building was abandoned. As

short-term repairs ceased, its deterioration rapidly increased. Under the assumption that there was no use for the building and that its renovation would be too costly, its owners, the South Parks Board, voted in 1921 to have it demolished.

Debate Over Preservation

In response, a group of concerned persons mobilized around the cause of the building's restoration and preservation. The "Committee for Restoration of the Fine Arts Building of the World's Columbian Exposition" was formed in late 1921 and made up of individuals who were active and powerful representatives of commercial, cultural, and civic interests. Among its leaders were sculptor/educator Lorado Taft; Frederick Lorenz of the Art Institute; Willim Nelson Pelouze of the Illinois Association of Arts and Industries; and George Maher, the chair of the restoration committee of the American Institute of Architects' local chapter. The committee's goal was to reuse the structure to house various organizations that were in need of space.

The activities of the committee sparked a spirited public debate over the question of whether the



After the Field Museum left in the early 1920s, the building was vandalized and its exterior plaster "staff" began to deteriorate. At left, the center dome; at right, the connection between the main building and an annex.

building should be restored. Among others, famed architect Louis Sullivan (who had designed one of the few non-classical structures at the fair, the Transportation Building) singled out the old Fine Arts Building for scorn as the embodiment of the blind stylistic imitation that had been perpetrated by the fair. The issue of its preservation may have been the inspiration for Sullivan when he wrote in early 1924, that due to the Columbian Exposition, "Architecture died in the land of the free and the home of the brave....The damage wrought by the World's Fair will last for half a century."

Modernist architect Andrew Rebori echoed Sullivan's sentiments a few months later in a national magazine article, where he decried the "sentimental uprising" led by "antiquarians (who have) raised their faint cry of preservation." Rebori questioned the value of repairing "a scaly, wormy pile, only suggestive by its form and mass of a one-time grandeur." He spoke in favor of a rational basis for a new architecture, rather than a "futile gesture" recommended by "sentimental idiots" in regard to preserving the old.

Meanwhile, the restoration committee had been promoting the economic potential of the building as a convention center, pointing out that smaller cities in the region were ahead of Chicago in developing a large-scale convention facility. Other proposed uses included a school of industrial design, a sculpture museum, and a women's center and memorial hall.

The committee arranged for the national convention of the American Institute of Architects (AIA), which was meeting in Chicago in June 1922, to hold a formal dinner and presentation under the building's crumbling dome in order to rally support among design professionals for the preservation cause. In a pamphlet titled "A Challenge to Civic Pride," the committee argued that the building could be compared "to a Rembrandt or Corot," and quoted noted authorities to emphasize the aesthetic reasons for its preservation:

The Fine Arts Building in Chicago is surpassed only by the Parthenon at Athens, which is considered the most beautiful building in the world, although it is now in ruins. Augustus Saint-Gaudens, the famous American sculptor, is the authority for the statement that the Fine Arts Building is the most beautiful classic building since the days of Pericles. This authority substantiates the assertion that America--in fact, Chicago--possesses the world's second greatest architectural monument of the classical style.

Start to Save Chicago's Great Monument



The Chicago Association of Commerce was a strong advocate for saving the Fine Arts Building. This article is from its March 1923 newsletter.

To further emphasize the aesthetic potential of a renovated building, members of the local AIA chapter donated their architectural services and the Illinois Federation of Women's Clubs contributed \$7,000 in materials to have a section of the building's East Annex restored, as a means of rousing public support for the project. Under the advice of Lorado Taft, the restoration was accomplished using the cast concrete technique that Taft had employed for his then newly-completed *Fountain of Time*, which was located at the west end of the fair's old Midway.

In March 1923, the *Chicago Tribune* editorialized vigorously in favor of the building's preservation:

The Fine Arts building in Jackson Park is one of the architectural gems of the world. It is a monument of beauty which, if it were in Greece or Italy, Americans would make pilgrimages to see. If preserved, it will be an attraction for the world, and if Chicago does not preserve it we shall lose not only a priceless asset but advertise the city as lacking in appreciation of works of genius.

The committee's efforts were rewarded when, in April 1924, the South Parks Board adopted a resolution to restore the Fine Arts Building and, in order to pay for it, put a \$5 million bond issue on the general election ballot in June. The subsequent vote was nearly three to one in favor of the proposal.

Renovation Plan

During the summer of 1924, the architectural firm of Graham, Anderson, Probst & White was hired to examine the building and produce plans for its renovation. Working under the direction of Ernest R. Graham, who had been an assistant to Charles Atwood during the World's Columbian Exposition, the firm could not have been more closely connected to the building, having in its possession some of the original drawings.

Their new plans called for the exterior to be reconstructed in accordance with Atwood's design; in fact, notations on the blueprints specified that "the reproduction of all profiles, ornament and sculpture shall exactly conform to the original work."

Plans for the interior indicated that the space under the dome and axial courts was to be used for a convention center. The basement and annexes were to be subdivided for use by a school of industrial design, a

museum and study center dedicated to women's issues, and proposed museums of industry and of sculpture and architecture.

The original glass-and-iron treatment of the interior was to be retained, as was the classical detailing. Some changes were to be included due to the new uses and configurations imagined for the spaces. The most spectacular of these was an auditorium and an in-the-round stage to be located under the central dome for convention purposes.

However, the work was delayed by a lawsuit that challenged the legality of the South Parks Board to issue bonds for this purpose. No further action was taken for two years, when the Illinois Supreme Court upheld the Parks Board's actions. But work was again delayed that summer when another group proposed an alternative program for the reuse of the building.

Museum of Science & Industry (1926-present)

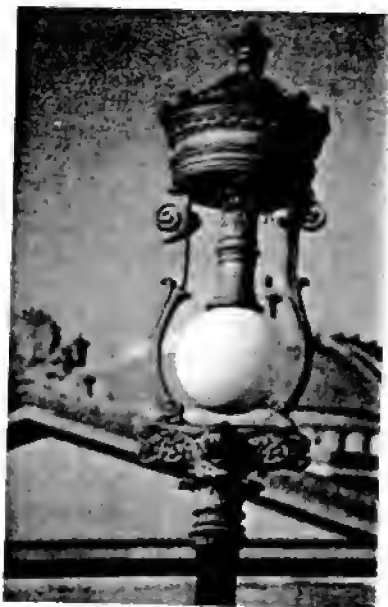
In June 1926, the Commercial Club of Chicago sponsored a proposal by Julius Rosenwald (1862-1932), chairman of Sears, Roebuck and Company, to create an industrial museum that would be located in the old Fine Arts Building. Rosenwald's vision was to create a place for the demonstration of new scientific discoveries and their potential, and of newly realized industrial and commercial applications.

This proposal was a much larger scheme than that imagined in the bond issue of 1924 and, although the South Parks Board voted to accept it, questions were raised as to the focus and scale of the proposed museum. The Board decided to send two of its members and Rosenwald to Europe to tour museums of industry and technology in early 1927, with particular attention paid to the Deutsches Museum in Munich and the Technologisches Museum in Vienna.

Upon his return, Rosenwald offered the South Parks Board \$3 million to establish the new museum, including hiring staff, building a collection, and additional planning for the renovation of the old Fine Arts Building. By the time of his death in 1932, Rosenwald's total gifts to the museum, including subsequent grants for the reconstruction of the exterior and

the installation of the original exhibits, came to over \$7 million. The level of Rosenwald's commitment ensured that the building would be rehabilitated and used according to his vision rather than that of the earlier restoration committee. (Although its official name is the Museum of Science and Industry, the building early on was known as the Rosenwald Technical Museum.)

The Building's Renovation



Only a few of the original light fixtures of the fair grounds remain (see caption page 9). Two are located west of the museum (above); their "heads" were restored as part of the 1930s renovation work.

The decision was made to carry forward with the plans for the exterior, largely unchanged, under the direction of Graham, Anderson, Probst & White. The major exception being that, due to Rosenwald's gifts, the proposed cast concrete facing could be abandoned in favor of a facade in Bedford limestone. The nature of the cast concrete material, being irregular in color and uneven in texture, apparently was found to be detrimental to the style of the exterior, which depended on exactitude and an angular interplay of light and shadow. Limestone, on the other hand, was found to successfully articulate the monumental character of the large-scale design elements, while capturing the subtleties of the sculptural figures and reliefs.

The exterior reconstruction in limestone was completed in 1930. The architects' fidelity to the original design was absolute; according to one of the project architects, "every precaution was taken to reproduce, to the smallest possible physical detail, the original as erected under Atwood's direction." The only noticeable changes from the original design were: the removal of the word "ART" from the round panel on the north and south pediments; the removal of the lions and the figure of Athena from the south entrance; a change in four of the allegorical figures beneath the pediment to reflect the sciences instead of the arts; a lengthening of the balustrade along the lagoon; and the replacement of the original skylights with copper roofs over the axial courts.

Changes also occurred to the landscape. By 1937, new retaining walls had been built along the shores of the north lagoon, many of the original ornamental light fixtures restored, and the museum's south plaza, balusters, and steps renovated. A parking lot was constructed on the building's west side for staff members and visitors to the Auditorium.



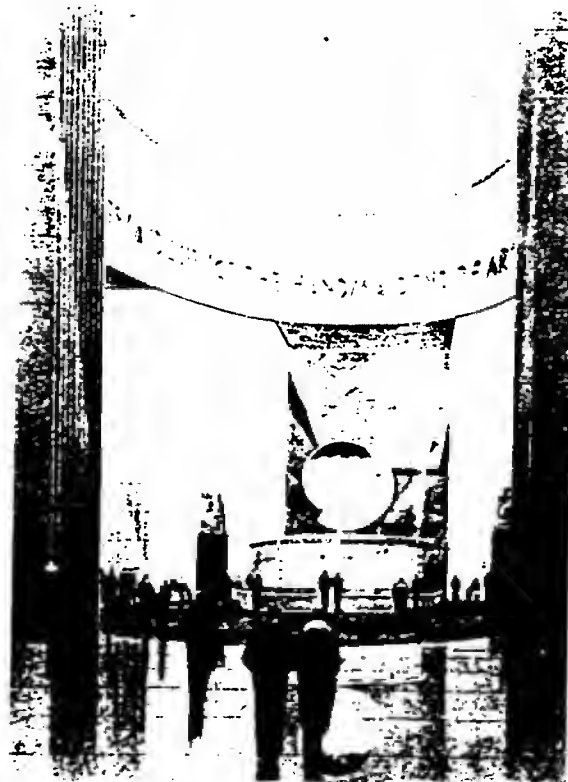
The reconstruction architects' fidelity to the original exterior of the 1892 building design was absolute. Even the tiniest detail was reproduced in the new limestone cladding that covered the original brick structure. Below, a 1948 photo, looking northeast over the lagoon. Above, various building details.



Although the exterior was renovated to the exact specifications of the original, the 1924 plans for the interior renovation were abandoned for an entirely new scheme adapted to the specific needs of the science museum. The interior work was started in 1930 under the direction of Shaw, Naess and Murphy, three individuals who had left Graham, Anderson, Probst & White to start their own firm.

The intent of their design was to create a background for the exhibits that would be simple and unified, and not distract from the displays. According to architect Alfred Shaw, from an article of the time:

On crossing the Museum threshold the architectural tone changes very definitely. This is so and is intentional. The new interior is one designed for utility and is related to its primary purpose—the housing of a museum of science and industry....The style is so simple as to be nameless. With its plain surfaces and modern materials it has a contemporary ease with none of the habitual idioms of the so-called International style.



Although the building's exterior was faithfully reconstructed, the interior was completely remodeled in 1930 to fit the needs of its new tenant, the Museum of Science and Industry. Left, the rotunda in 1893; right, a 1930 sketch of its Art Deco remodeling.

The massing and details of this interior are of the Art Deco style. The most distinctive features are the bronze doors designed by Percy Lund and Leonard Crunelle in the main portals. The doors are finished with panels representing various museum departments. Noteworthy also are the streamlined decorative wall treatment and light fixtures of the auditorium.

The color scheme makes use of a wide range of tones of gray. The walls and piers of the transitional areas--including the entrance lobby and rotunda--are faced with polished metal panels and moldings. The stairways and balconies have solid retaining walls topped by railings of a simple, modern design.

Flexibility in the use of the interior space was guaranteed by minimizing the number of permanent walls, thus keeping the future expansion of the collection in mind. A particularly difficult task was the renovation of the west annex to allow for the construction of an auditorium. A new steel, clear-span frame was built within the envelope of the existing building and constructed on new foundations to carry the load of the dome, thereby making it possible to remove the original structural members and allow for the auditorium space.



The walls and ceiling of the museum's remodeled 1930s entrance lobby are faced with polished metal panels and moldings.

Century of Progress Exposition

The courts along the north-south axis and the crossing under the dome were first opened to the public in the spring of 1933. The date was auspicious since it coincided with the opening of Chicago's second world's fair, the Century of Progress Exposition, which was held on the northerly island in Grant Park (now Meigs Field). Emphasizing the new fair's theme of "progress," the Museum of Science and Industry created an exhibit that juxtaposed the now 40-year-old "technological wonders" of the previous fair with more recent advances.

The renovated building--with its Beaux-Arts exterior renovation, its new Art Deco interior, and the exhibition that connected the two eras--thus became the only structure that participated in and included design elements from Chicago's two world's fairs, giving it a unique place in the history of the city.

The first president of the Museum of Science and Industry was Rufus Cutler Dawes, previously president of the Century of Progress Exposition. Dawes was dedicated to Rosenwald's vision for the museum; it



A contemporary view of the museum's rotunda, from the balcony. Foreground: the propeller of a British Spitfire.

was under his supervision that the building's renovation was completed.

Continuity in the museum collections was further guaranteed when Lenox R. Lohr became president after Dawes' death in 1940. Lohr, president of the National Broadcasting Company, had served as general manager of the Century of Progress and was well acquainted with Dawes and with Rosenwald's vision.

Some of the exhibits at the Century of Progress--many of which were owned or sponsored by major corporations--were donated to the museum after the fair closed in 1934. The museum's corporate relationships have continued ever since, including such large-scale donations as a Burlington Zephyr locomotive and a Boeing 727 from United Airlines.

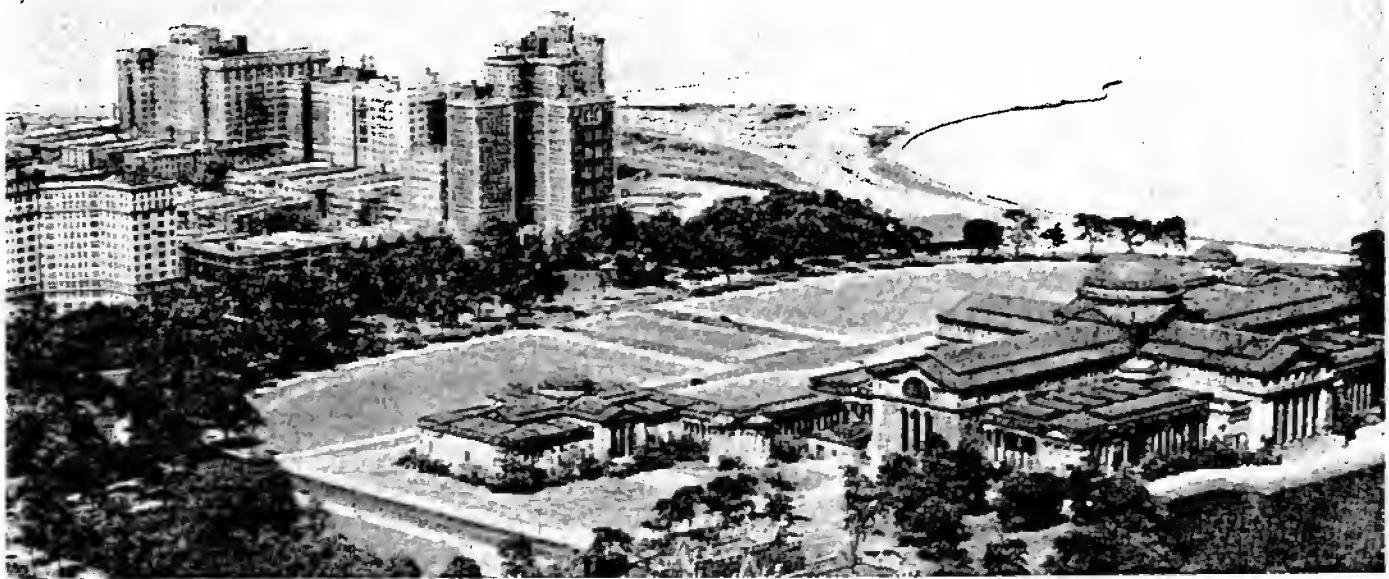
The popularity of the permanent exhibits, such as the Coal Mine, the walk-through Human Heart, the model railroad, and the U-505 submarine, have made the museum a major visitor destination. Its annual attendance makes it one of the country's most popular museums. The building has continued to be used for purposes consistent with its original design: as a large-scale exhibition space that is a major public destination.

The Museum Since 1940

There have been few changes, other than to mechanical systems, to the building since its renovation was completed in 1940. With the one exception of a 1986 addition, it has retained an exceptionally high degree of its original exterior design integrity. Its 1930s Art Deco interior also remains largely intact.

The impact of the museum on the surrounding landscape, however, has been significant. The green lawns that were planted north of the building at the time of its renovation have been replaced over the years by surface parking lots (see photographs on facing page). The only remaining open green space is at the southwest corner of Lake Shore Drive and 57th Street, still slightly depressed below grade level as it was prior to the 1930s renovation.

The construction of Lake Shore Drive, south past the museum during the 1920s and 30s, also had a major impact on the building. The Drive's extension was significant because it gave a new prominence to the "back" of the building, the north elevation, which became the building's principle facade.



Two aerial views of the old Fine Arts Building, looking north over Jackson Park. Top, just prior to its 1930s renovation; below, in 1992, its surface parking lots serving a new tenant, the Museum of Science and Industry.

The most significant change occurred in 1986, when the museum built the first addition outside the envelope of the original building. Known as the Henry Crown Space Center, this domed structure, which houses the 350-seat OmniMax Theater, stands east of the main building between the east annex and the north pond of the lagoon. It was designed by the architectural firm of Loeb, Schlossman & Hackl and, although domed, does not fit with the stylistic vocabulary of the original building. Its location damages the symmetry of the building's south elevation and encroaches on the frontage of the lagoon.

While these recent changes have been unfortunate, the building and landscape still retain a great deal of their original aspects, particularly when seen from the south: on the lagoon, from Jackson Park, or from the Wooded Island. The contrast here between the ideas of Olmsted, who favored the natural landscape, and the formalism of Atwood's building design still are presented with the same clarity that they had during the World's Columbian Exposition.

Conclusion

The themes of innovation and creativity that were essential to the concept of the World's Columbian Exposition of 1893 were embodied in the fair's overall design and in its many parts. The survival of the former Fine Arts Building and its landscape represents the only surviving elements of the fair's grand vision, one that had international importance for civic architecture and city planning. Additionally, its renovation and adaptive use represents one of the earliest successful efforts to save and rehabilitate a prominent public building, marking a milestone in the historic preservation movement in Chicago.

The building that houses the Museum of Science and Industry is an exceptional monument to the creative efforts of generations of Chicagoans, due to its associations to the artistic and architectural program of the fair, its connection with the Century of Progress of 1933-34, and its continuing use as the home of one of the great institutions dedicated to the history and development of science and its industrial applications.

APPENDICES

Criteria for Designation

Designation of the Museum of Science and Industry Building as a Chicago Landmark is recommended because the building meets six of the criteria for landmark designation as set forth in Section 2-120-620 of the Municipal Code of Chicago.

CRITERION 1

Its value as an example of the architectural, cultural, economic, historic, social, or other aspect of the heritage of the City of Chicago, State of Illinois or the United States.

The building that houses the Museum of Science and Industry is one of the few surviving elements of the World's Columbian Exposition of 1893. Built to house the Fine Arts exhibition, it is the only major building built on the fair grounds still standing.

The importance of the fair to the City and the nation cannot be underestimated. Not only was it the most popular public attraction in American history up to that time, but its impact on the City Beautiful Movement for landscape design, architecture, and city planning was profound. It made the classical ideal, as applied to buildings individually and collectively, the dominant style in the nation for over 30 years. The building and its site demonstrates, particularly on its south elevation, the relationship the designers of the fair sought between the landscape and the monumental-scaled, neoclassical-styled buildings.

CRITERION 2

Its location as a site of a significant historic event which may or may not have taken place within or involved the use of any existing improvements.

The World's Columbian Exposition of 1893 was so important in the history of the City of Chicago that it is commemorated by one of the stars on the city flag. In addition to honoring the 400th anniversary of Columbus' landing in the

western hemisphere, it heralded the rebirth of Chicago from the disastrous Fire of 1871.

As the Palace of Fine Arts during the Columbian Exposition, the building housed objects that were organized so as to confidently express the cultural maturity of the United States and to demonstrate to the world that the American West was not a wild and uncivilized place. The fair established Chicago as a cosmopolitan center not only of commerce, but of the arts and sciences, a status that it has continued to hold since that time.

CRITERION 3

Its identification with a person or persons who significantly contributed to the architectural, cultural, economic, historic, social, or other aspect of the development of the City of Chicago, State of Illinois or the United States.

Many people of regional and national importance have been associated with the Museum of Science and Industry building throughout its history. In addition to its architect, Charles Atwood, and the fair's planner, Daniel Burnham, the building was associated with Marshall Field, who established the Field Museum of Natural History. The former Fine Arts Building was the first home of this institution, which housed extensive collections retained from the fair and was originally known as the "Field Columbian Museum."

The building is also associated with Julius Rosenwald, another prominent local businessman and philanthropist, whose was the founder of the Museum of Science and Industry. Also prominent throughout its early history was the Commercial Club, whose members were active in securing the world's fair for Chicago in 1893, and who participated in fundraising for the renovation of the building to house the Museum of Science and Industry in the late 1920s.

CRITERION 4

Its exemplification of an architectural type or style distinguished by innovation, rarity, uniqueness, or overall quality of design, detail, materials, or craftsmanship.

The Museum of Science and Industry qualifies under this criterion twice: once as an exemplar of Beaux-Arts classicism, and secondly as an innovative adaptation of Art Deco to the reconstructed interior.

The building is acknowledged as one of the most important designs at the World's Columbian Exposition, executed in a style that ultimately influenced the design of public buildings for the next three decades. The 1892 design for the plaster exterior was reproduced exactly in Bedford limestone in the late 1920s and early 1930s, effectively preserving and perpetuating it. The interior, however, was entirely reconstructed during the same period in a contemporary, streamlined Art Deco style that was more adaptable to the needs and functions of the newly established Museum of Science and Industry.

Both of these designs are noteworthy; together they demonstrate an innovative solution to the problem of adaptive reuse, and represent a truly unique architectural statement.

CRITERION 5

Its identification as the work of an architect, designer, engineer, or builder whose work is significant in the history or development of the City of Chicago, State of Illinois or the United States.

Architects and designers of regional and national importance have been associated with the Museum of Science and Industry building throughout its history. The supervisor of its construction at the world's fair was Daniel H. Burnham, architect and planner, who was later responsible for many city plans in the U.S. and overseas, in addition to his seminal Plan of Chicago of 1909.

Architect George W. Maher, an important designer of the Prairie School, was a leader in the effort to save and renovate the former Fine Arts Building in the early 1920s. As an officer of the Chicago Chapter of the American Institute of Architects, Maher was influential in bringing public and professional attention to the building and the cause of its preservation.

The architecture firm of Graham, Anderson, Probst and White, one of the descendants of Burnham's firm, was responsible for the renovation of the exterior of the building, and had an international reputation in the design field. The firm of Shaw, Naess & Murphy, another descendant of D.H. Burnham and Company and the designers of the interior renovation for the Museum, has had an extremely long and illustrious career which continues under its current name, Murphy/Jahn.

All of these designers have been associated with the museum building, and all have contributed substantially to the establishment and perpetuation of Chicago's century-old reputation as a center for architectural innovation.

CRITERION 7

Its unique location or distinctive physical appearance or presence representing an established and familiar visual feature of a neighborhood, community, or the City of Chicago.

The Museum of Science and Industry has a uniquely prominent location, surrounded by the landscape of Jackson Park, with the lagoon immediately to the south and the lakeshore nearby. Today it is a major destination for visitors, being one of the museums with the highest annual attendance in the country. With the construction of Lake Shore Drive, it has become a major feature along the lakefront, as well as one of the commonly repeated images on city postcards and souvenirs.

It has had a major role in the cultural life of Chicago for a century, and clearly has an established and distinctive presence in the physical sense as well as in the cultural life of the city of Chicago.



A c.1970 photo of the Museum of Science and Industry's south elevation, looking northwest across the frozen Columbia Basin lagoon.

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(cover; facing p. 1; pp. 20, 25 bot.)

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The Architecture of John Wellborn Root (1973)

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Simmons, from Daniel H. Burnham, *Architect, Planner of Cities* (1968)

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The Architecture of the Ecole des Beaux-Arts (1977)

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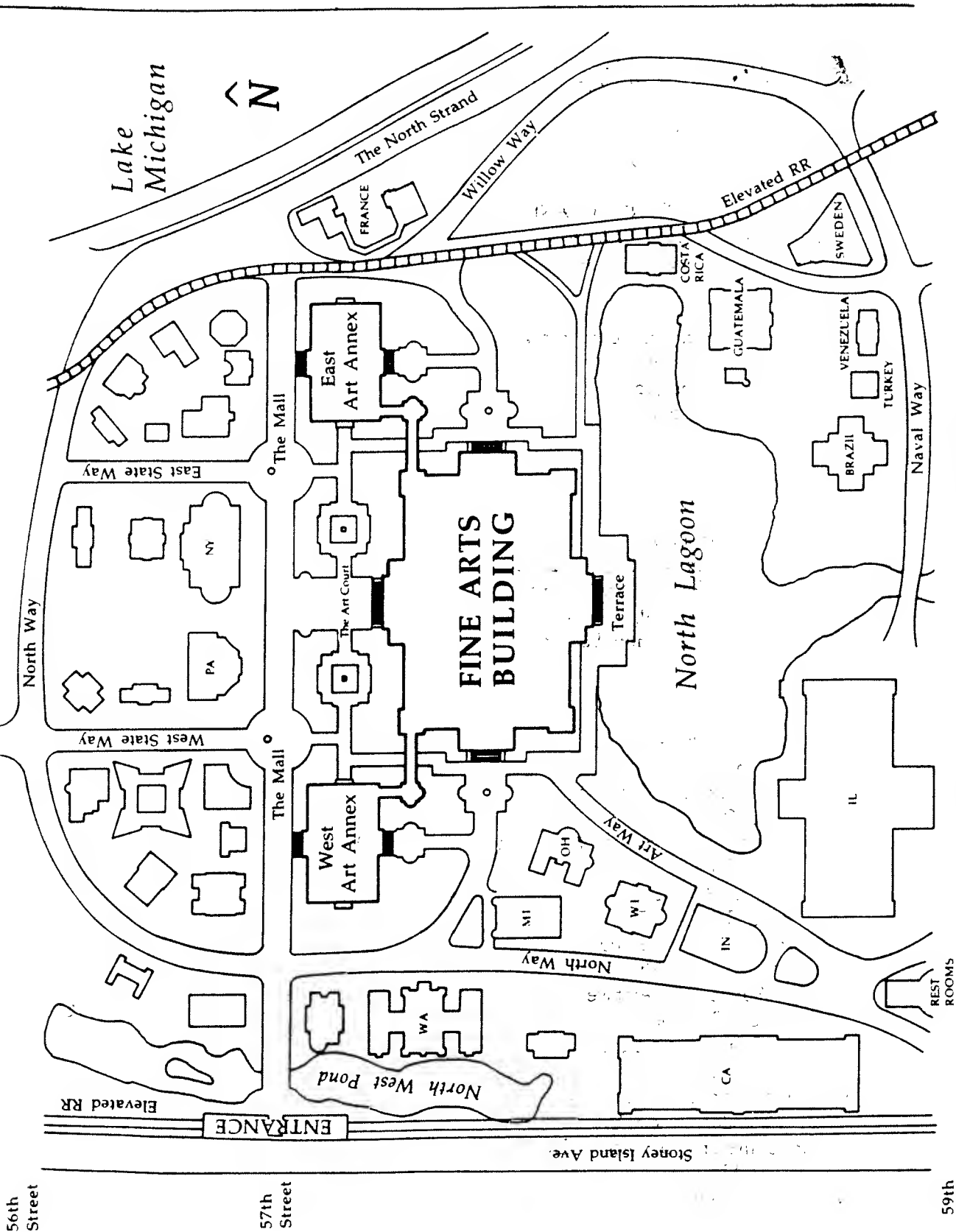
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Robert Cameron, from *Above Chicago* (1992)

(p. 29 bot.)

Museum of Science and Industry Notes (Aug. 1937)

(p. 26 right)



Site plan of the Fine Arts Building and surrounding state and foreign pavilions during the 1893 World's Columbian Exposition.

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